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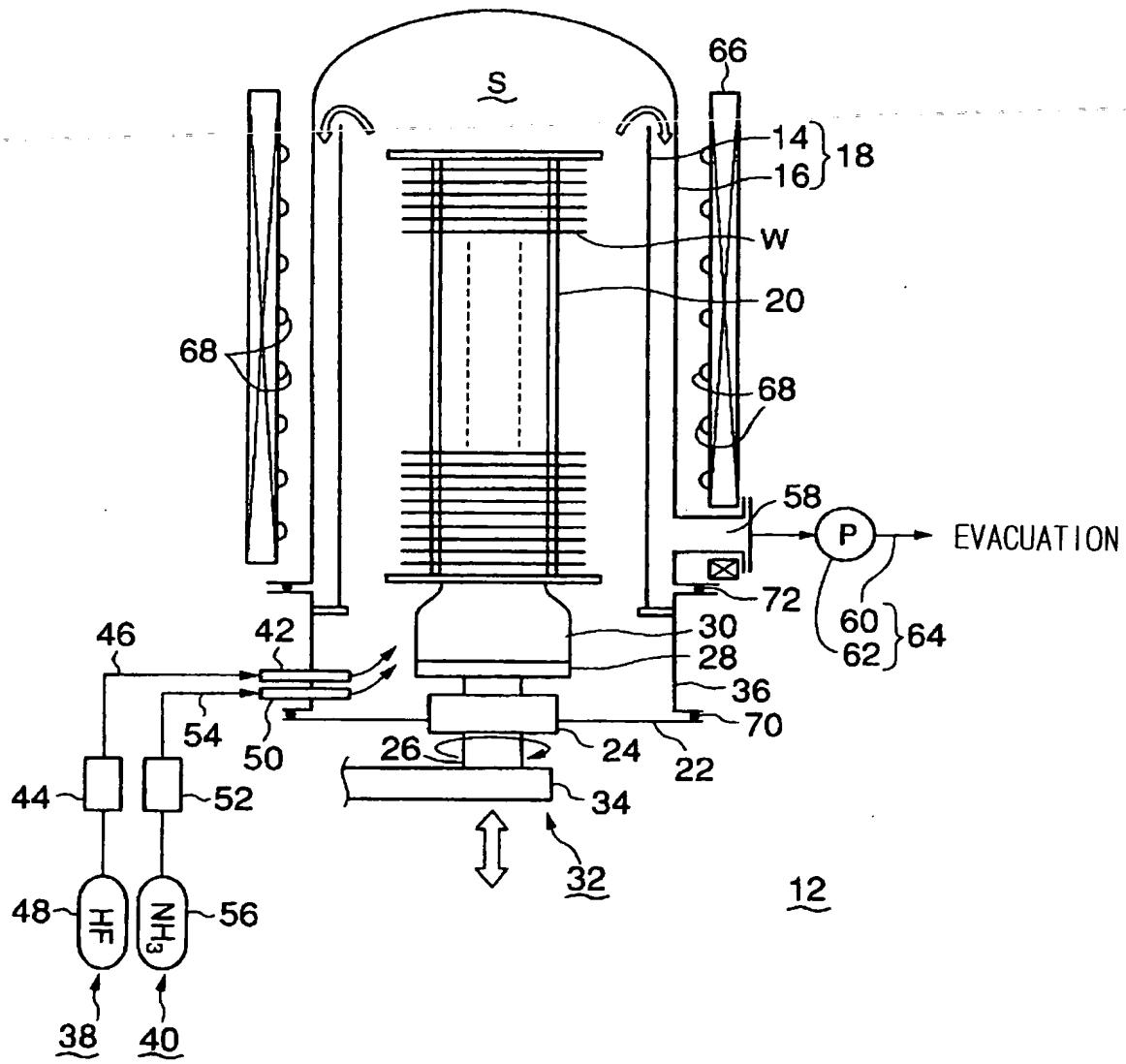


FIG. I

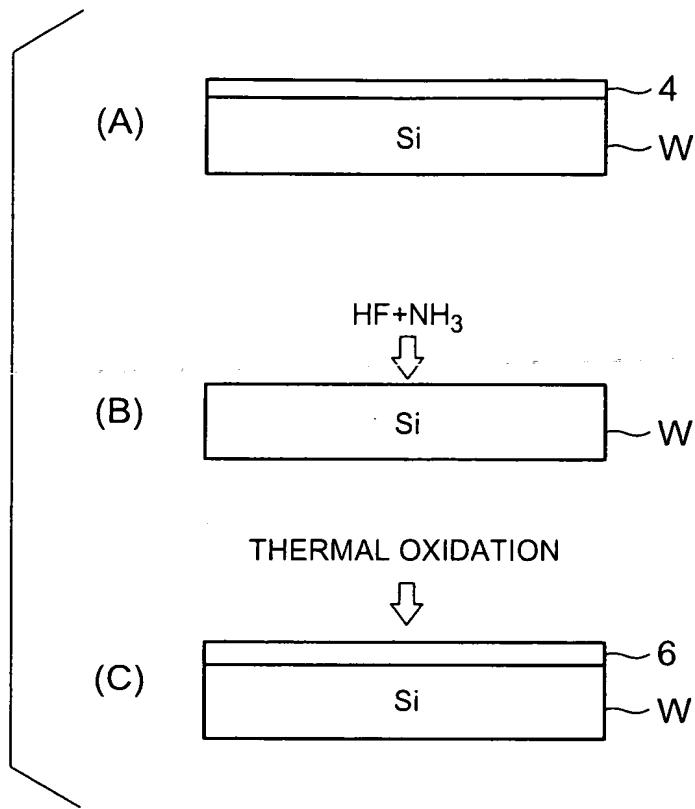


FIG. 2

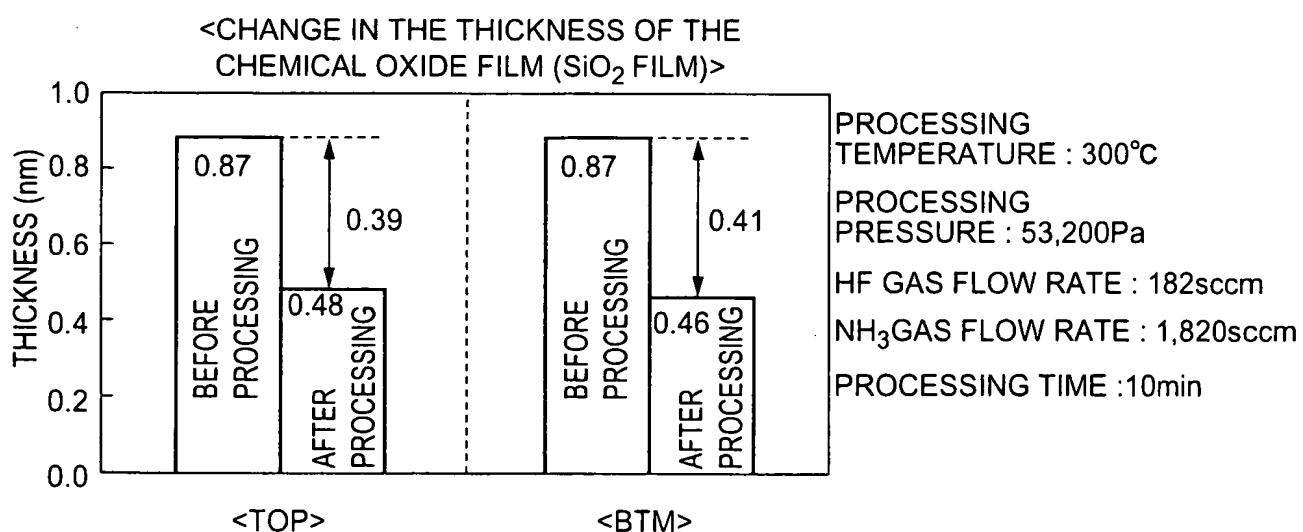


FIG. 3

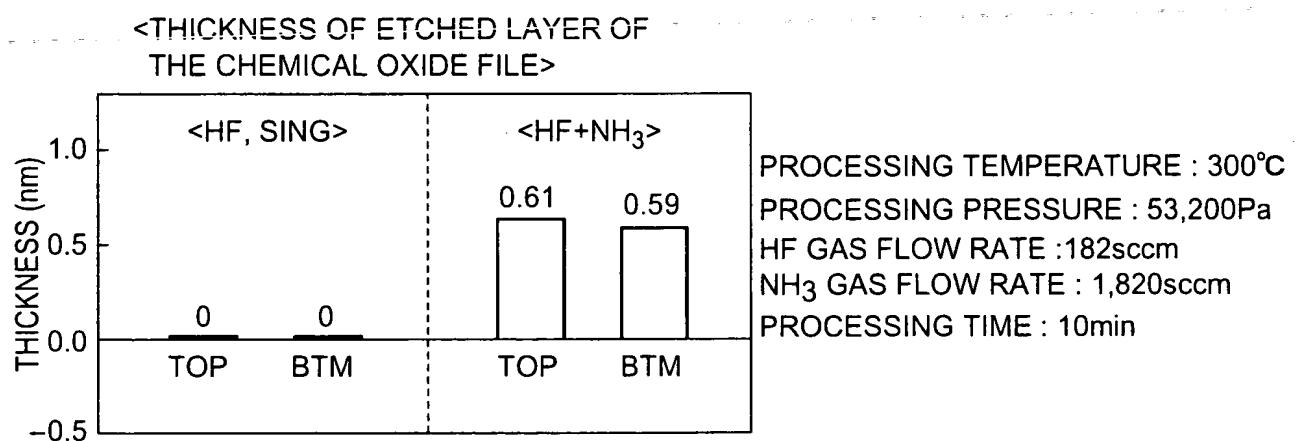


FIG. 4

<ETCH SELECTIVITY FOR CHEMICAL OXIDE FILM>

TEMPERATURE °C	PRESSURE Torr	HF sccm	NH ₃ sccm	CHEMICAL OXIDE FILM nm	POLYSILICON FILM nm	SiN nm	TEOS (SiO ₂) nm	THERMAL OXIDE FILM (SiO ₂) nm	
								SiO ₂	SiO ₂
100	VAC	182	1820	0.16	0	0	0.23	0.79	0.10
	7.6	1820	182	0	0	6.20	15.37	12.52	
	400	1000	1000	0	1.29	16.61	35.07	40.78	
	VAC	1820	182	0	0	0.14	0.53	0.08	
300	7.6	1000	1000	0.12	0	0	0.05	0	0.01
	150	182	1820	0.22	0	0	0.26	0.37	0.03
	400	1000	1000	0.42	0	0	0.61	1.19	0.27
	VAC	1000	1000	0.58	0	0	1.99	11.02	1.71
400	7.6	1820	182	0.61	0	0	3.22	93.90	2.28
	400	1820	1000	0.16	0.04	0	0.01	0	0
	VAC	1820	182	0.10	0	0	0.03	0	0
	400	1820	182	0.35	0	0	5.42	0.55	0.07
600	VAC	1000	1000	0.18	1.35	0.08	0	0.57	0
	7.6	182	1820	0.10	0.40	0.10	0.40	0.40	0.02
	400	1820	182	—	—	12.43	0	8.62	

<1Torr=133Pa>

FIG. 5

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	TEMPERATURE	PRESSURE	TIME	HF	NH ₃	POLYSILICON FILM	SiN	TEOS	Thermal oxide film	Chemical oxide film	
	°C	Torr	min	(sccm)	(sccm)	TOP	BTM	TOP	BTM	TOP	BTM
HF:NH ₃ =1:10	200	150	10	182	1820	0	0	0.58	0.63	9.04	24.07
HF:NH ₃ =1:20	200	150	10	91	1820	0	0	0.12	0.15	3.22	8.50
HF:NH ₃ =1:50	200	150	10	36	1820	0.03	0.09	0.03	0.04	2.02	2.19

FIG. 6

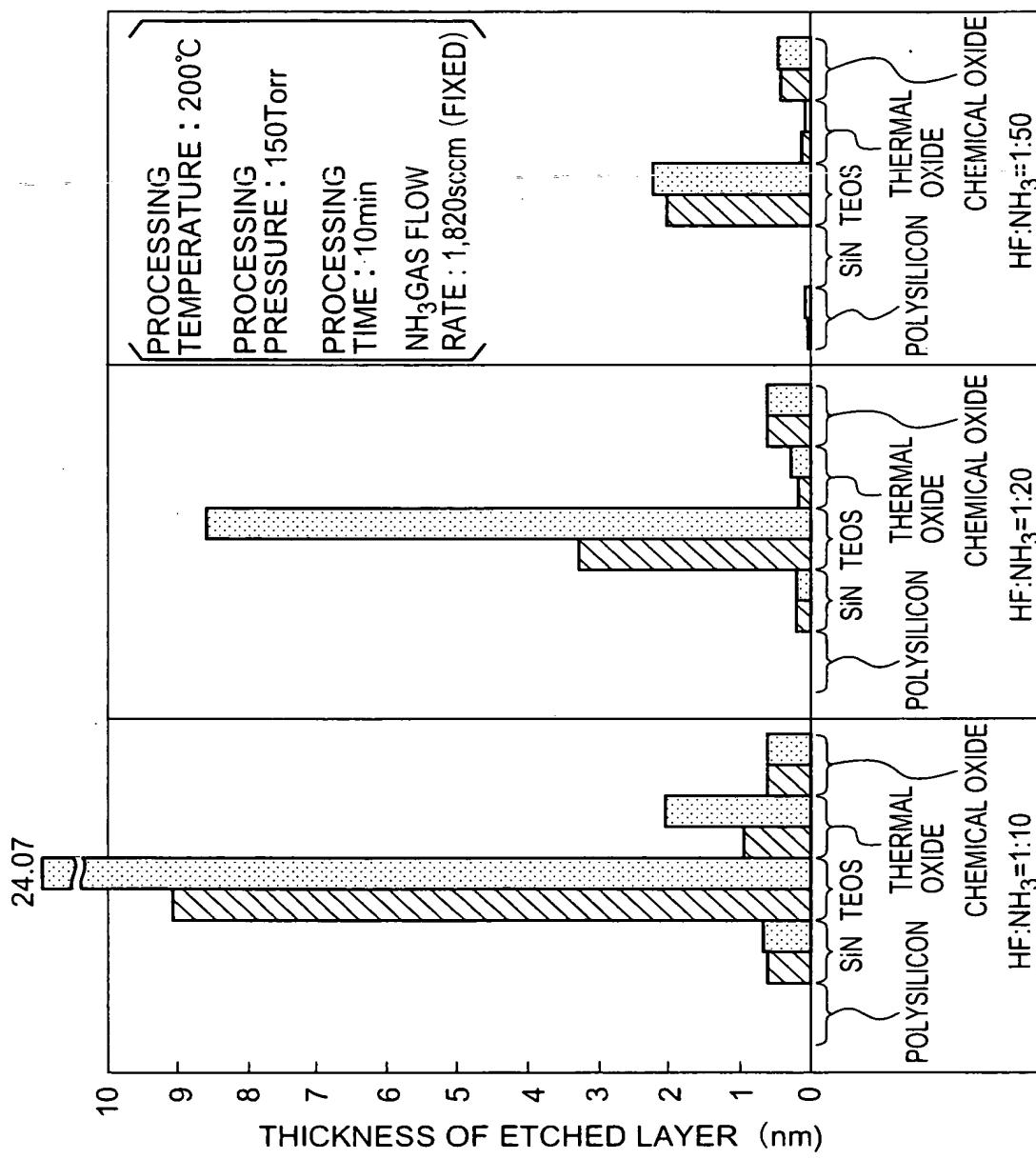


FIG. 7

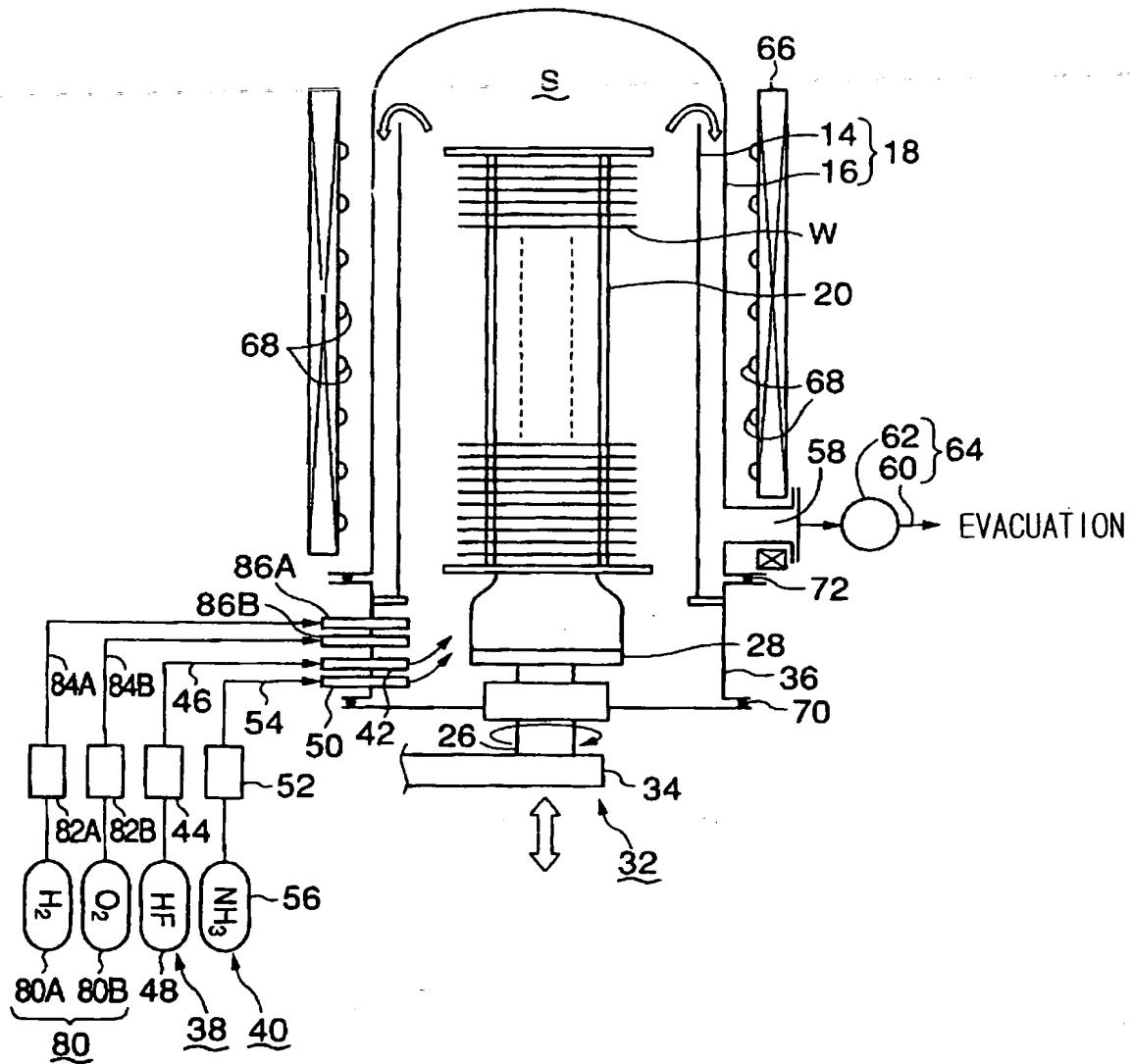


FIG. 8

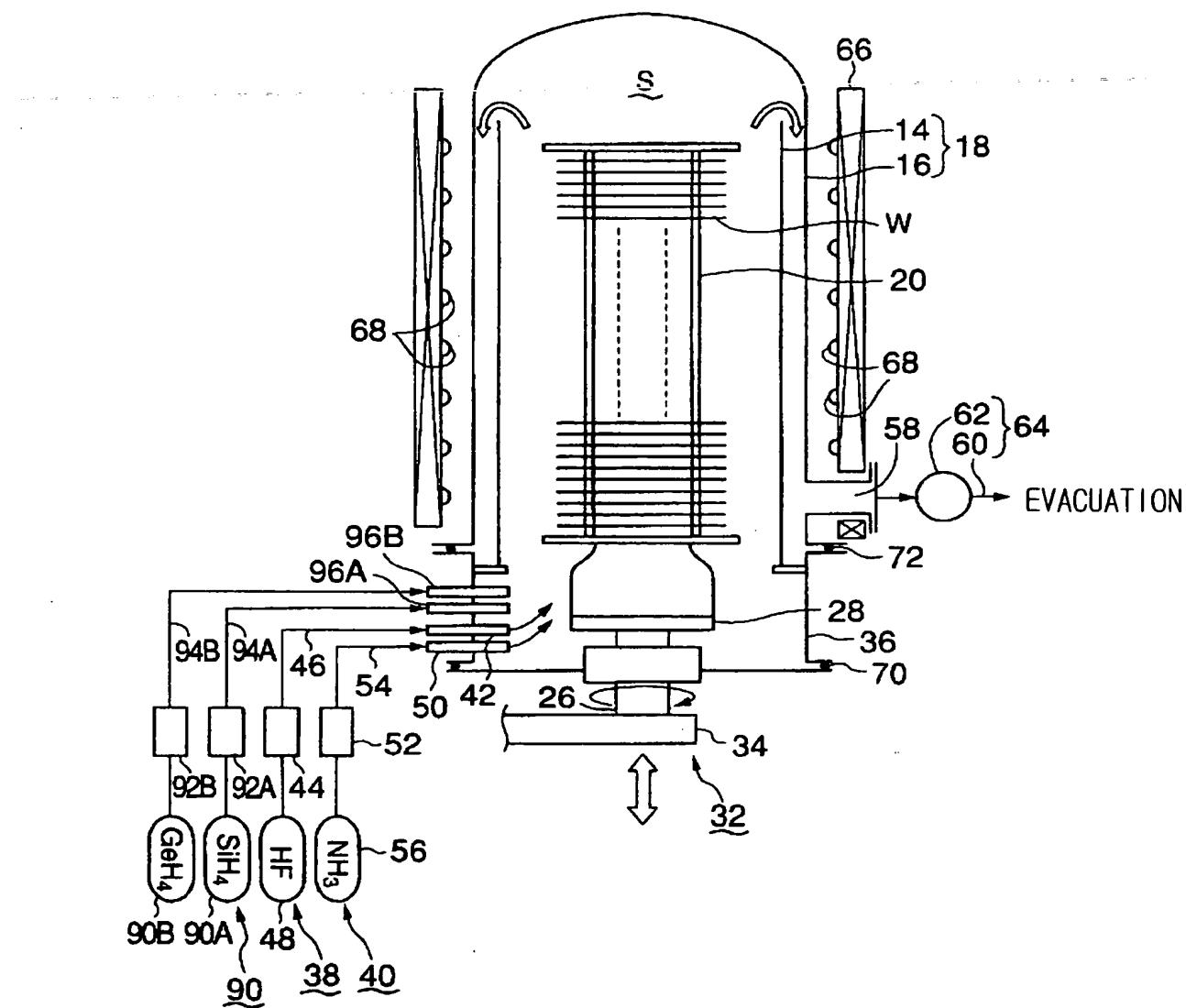


FIG. 9

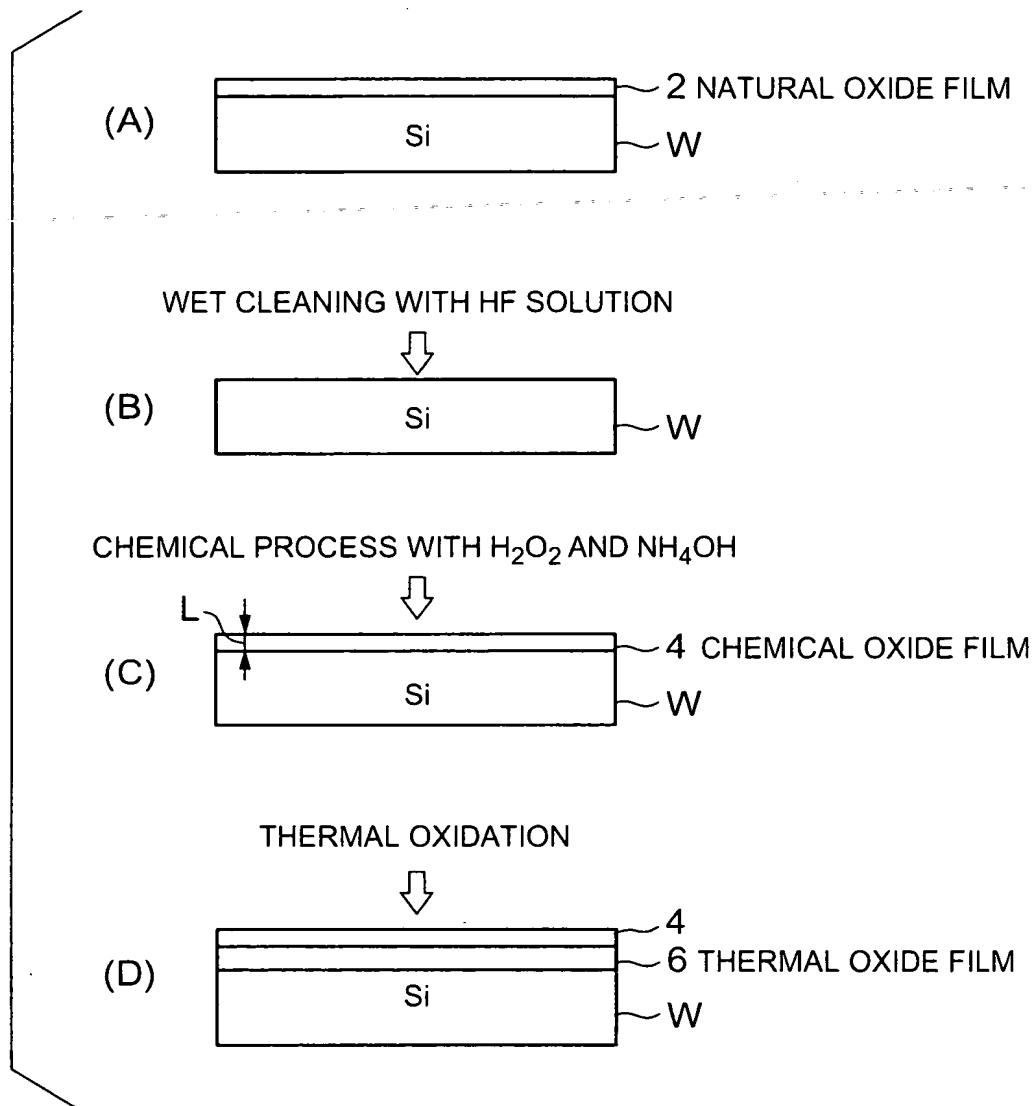


FIG. 10